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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/846,572 | 05/01/2001 | Fabrizio Loppini | GB920000073US1 | 4857 |
| 7590 | 02/27/2004 | | EXAMINER | |
| Edward H. Duffield IBM Corp, IP Law Dept T81/503 3039 Cornwallis Road PO Box 12195 Research Triangle Park, NC 27709-2195 | | | NGUYEN, LE V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2174 | 3 |
| DATE MAILED: 02/27/2004 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------------|------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/846,572 | LOPPINI ET AL. | |
| | Examiner Le Nguyen | Art Unit 2174 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 555 and 560 of fig. 5. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 7-10, 12-14 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Goh (US 5,678,015).

As per claim 1, Goh teaches a GUI system for displaying a plurality of icons, the system comprising means for depicting a desktop which conceptually provides a three-dimensional surface for the icons, in which the three dimensional surface is represented on a two-dimensional display device and means for supporting navigation of the desktop by simulating a rotation of the desktop in three-dimensional space (Abstract; figs. 5-6; *described and depicted is a three-dimensional workspace with real-time rotation*).

As per claim 2, Goh teaches a GUI system for displaying a plurality of icons in which the desktop is viewed at an apparent distance from a user viewpoint and the means for depicting includes means for calculating a viewing distance for each of the plurality of icons based on the apparent distance and the location of the icon on the three-dimensional surface and means for scaling each of the plurality of icons by the relevant viewing distance (figs. 5-6; col. 6, lines 29-32; *users control viewpoint, e.g. as can be seen from the comparison between figs. 5 and 6, icons are scaled according to users' viewpoint*).

As per claim 3, Goh teaches a GUI system for displaying a plurality of icons comprising means for changing the apparent distance between the viewpoint and the desktop (figs 5-6; *desktop 500 of fig. 5 is viewed from a closer distance than desktop 500 of fig. 6*).

As per claim 7, Goh teaches a GUI system for displaying a plurality of icons in which an icon is initially added to the center of the desktop by default (col. 6, lines 20-21).

As per claim 8, Goh teaches a GUI system for displaying a plurality of icons in which the means for supporting navigation is responsive to dragging the desktop with a pointing device in order to rotate the desktop (col. 6, lines 35-37).

As per claim 9, Goh teaches a GUI system for displaying a plurality of icons in which the a means for supporting navigation that is responsive to dragging an icon beyond the desktop with a pointing device in order to rotate the desktop (col. 6, lines 35-37; *desktop is rotated via axes icon(s)*).

As per claim 10, Goh teaches a GUI system for displaying a plurality of icons in which the plurality of icons are grouped automatically according to pre-determined criteria (col. 6, lines 20-21).

Claim 12 is similar in scope to claim 1 and is therefore rejected under similar rationale.

Claim 13 is similar in scope to claim 2 and is therefore rejected under similar rationale.

Claim 14 is similar in scope to claim 3 and is therefore rejected under similar rationale.

Claim 18 is similar in scope to claim 7 and is therefore rejected under similar rationale.

Claim 19 is similar in scope to claim 8 and is therefore rejected under similar rationale.

Claim 20 is similar in scope to claim 9 and is therefore rejected under similar rationale.

Claim 21 is similar in scope to claim 10 and is therefore rejected under similar rationale.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 4-6 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh (US 5,678,015).

As per claim 4, although Goh teaches a GUI system for displaying a plurality of icons comprising a means for storing the position of each of the plurality of icons, in which the position is stored as a two-dimensional co-ordinate relative to the display device (col. 6, lines 25-28; col. 6, line 63 through col. 7, line 7; col. 9, line 43 through col. 8, line 13), Goh does not explicitly disclose storing the position of each of the plurality of icons in an array. Official Notice is taken that the use of storing data values, such as the position of an icon, in an array is well known in the art and considered to be fundamental to data structures, and, in turn, a major

fundamental of computer programming. Therefore, it would have been obvious to an artisan at the time of the invention to include storing the position of each of the plurality of icons in an array of a GUI system for displaying a plurality of icons to Goh's means for storing the position of each of the plurality of icons so that data values of the same type may be referenced by a singular array name.

As per claim 5, the modified Goh teaches a GUI system for displaying a plurality of icons in which the means for supporting navigation comprises a means for determining a new two-dimensional co-ordinate for each of the plurality of icons following rotation of the desktop and a means for updating the array accordingly (col. 6, lines 3-28).

As per claim 6, the modified Goh teaches a GUI system for displaying a plurality of icons in which the means for determining comprises a means for transforming the two-dimensional co-ordinate of each of the plurality of icons into a three-dimensional co-ordinate, a means for changing the three-dimensional co-ordinates based on the rotation of the desktop and a means for transforming the changed three-dimensional co-ordinates into a new two-dimensional co-ordinate for each of the plurality of icons (col. 6, lines 3-42).

Claim 15 is similar in scope to claim 4 and is therefore rejected under similar rationale.

Claim 16 is similar in scope to claim 5 and is therefore rejected under similar rationale.

Claim 17 is similar in scope to claim 6 and is therefore rejected under similar rationale.

6. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goh (US 5,678,015) in view of Amro et al. ("Amro", US 5,515,486).

As per claim 11, although Goh teaches a GUI system for displaying a plurality of icons in which the three-dimensional surface is a cube (figs. 5-6), Goh does not explicitly disclose the

three-dimensional surface to be spherical in shape. Amro teaches a GUI system for displaying a plurality of icons in which the three-dimensional surface to be spherical in shape (fig. 3; col. 1, lines 12-16; col. 3, lines 21-23). Therefore, it would have been obvious to an artisan at the time of the invention to include Amro's GUI system for displaying a plurality of icons in which the three-dimensional surface to be spherical in shape to Goh's GUI system for displaying a plurality of icons in which the three-dimensional surface is a cube in order to provide users with an implementation preference.

Claim 22 is similar in scope to claim 11 and is therefore rejected under similar rationale.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Selker (US 6,182,098 B1) teaches next/current/last ticker graphical presentation method.

Kreitman et al. (US 5,303,388) teach method to display and rotate a three-dimensional icon with multiple faces.

Mackinlay et al. (US 5,689,287) teach context-preserving display system using a perspective sheet.

Hearst et al. (US 6,297,824 B1) teach interactive interface for viewing retrieval results.

Tanaka et al. (US 6,544,123 B1) teach game apparatus, command input method for video game and computer-readable recording medium recording programs for realizing the same.

Cherian et al. (US 6,211,921 B1) teach user interface for television.

Robertson et al. (US 5,295,243) teach display of hierarchical three-dimensional structures with rotating substructures.

Inquires

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lê whose telephone number is (703) 305-7601. The examiner can normally be reached on Monday - Friday from 5:30 am to 2:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached on (703) 308-0640.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

(703) 872-9306 [Official Communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

LVN
Patent Examiner
February 20, 2004

Kristine Kincaid
KRISTINE KINCAID
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100